

Appl. No. 09/690,673
Amdt. dated 9/9/04
Reply to Office Action of 3/10/04

PATENT
Docket: 000128

REMARKS

Claims 1-22 are pending in the application. Applicant has amended Claims 1, 11, and 21. Applicant respectfully contends that all pending claims are in condition for allowance. Applicant respectfully requests reconsideration and allowance of all claims.

Discussion of Rejections Under 35 U.S.C. 102:

The Examiner has rejected claims 1, 11, 21, and 22 under 35 U.S.C. 102(e) as allegedly anticipated by Shohara et al. (U.S. Patent No. 6,473,607, hereinafter referred to as Shohara). The Examiner contends that all of the claimed features are shown in the Shohara reference.

In order for a reference to anticipate a claim, the reference must teach each and every element as set forth in the claim. Applicant contends that Shohara fails to disclose at least one of the features of each of the claims, as amended. Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection based on Shohara.

Claim 1 claims a method including "providing a plurality of counters of substantially equal periods," and "establishing a roll over point for each counter at a predetermined offset relative to each other counter." The Examiner contends that Shohara discloses this in Figure 2 and the associated discussion. In particular, the Examiner identifies counters 80, 78 [*sic* 74], and 88 and the register 100 from Shohara Figure 2. However, the counters identified by the Examiner do not have "substantially equal periods" as featured in claim 1. Shohara describes a reference counter 74 as "repeatedly count[ing] the cycles of the reference clock 72 from the reference oscillator 90 up to modulus value F-d-1 and resets to zero at the next count." *Shohara*, Col. 13, ll. 5-7. Shohara also describes a "sleep counter 88 [that] repeatedly accumulates a fraction δ held in the sleep increment register 100, where the sleep counter accumulations are clocked by the low frequency clock 86 supplied by the sleep oscillator 96." Col. 13, ll. 41-45. The frame counter 80 can selectively count "frame epochs from the reference counter 74 during active mode and from the sleep counter 88 during sleep mode."

As shown in Figure 4 of Shohara, each of the clocks for the reference counter and the sleep counter are shown in relation to a frame counter clock. Although the period of the counters is not evident from Figure 4, the widely different clocks strongly suggest that the reference counter and sleep counter do not have similar periods. Furthermore, because the frame counter is

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clocked by either the reference counter or sleep counter, it cannot have the same period as the other counters.

Claim 1 additionally features "establishing a roll over point for each counter at a predetermined offset relative to each other counter." The counters in Shohara cannot have a predetermined offset relative to the other counters because "the reference counter 74 is disabled and supporting reference oscillator 90 is powered down by the event scheduler 106 during sleep mode to minimize power consumption. During active mode the sleep counter 88 is disabled but its supporting low frequency oscillator 96 may remain powered up due to its very low power consumption." Shohara Col. 14, ll. 19-24. Thus, because the counters can be selectively enabled and disabled, and because the frame counter can selectively count based on either the reference counter or the sleep counter, there cannot be "a roll over point for each counter at a predetermined offset relative to each other counter."

Therefore, because Shohara fails to disclose or even suggest all of the features of claim 1, Shohara cannot anticipate claim 1. Claims 11, 21 and 22 include similar features as discussed above in relation to claim 1 and, therefore, are believed to be allowable over Shohara at least for the same reasons presented above for claim 1. Applicant respectfully requests the Examiner withdraw the rejections based on Shohara.

The Examiner has also rejected claims 1-2, 5-6, 8, 10-12, 15, 18, and 20-22 as allegedly anticipated by Easton et al. (WO 00/04738). The Examiner contends that Easton discloses each and every element of the claims. However, Applicant contends that Easton fails to disclose at least one of the features of each of the claims, as amended and, therefore, respectfully requests reconsideration and withdrawal of the rejection based on Easton.

As discussed above, claim 1 claims a method including "providing a plurality of counters of substantially equal periods," and "establishing a roll over point for each counter at a predetermined offset relative to each other counter." The Examiner identifies reference numbers 203, 224, and 208, corresponding respectively to a sleep counter, combiner time counter, and time counter, in Figure 1 of Easton as the plurality of counters. However, it clear that not all of the counters identified by the Examiner have substantially the same periods. The sleep counter 203 is programmed by the microprocessor 106 to count the duration of the sleep interval. Easton page 6 line 39 - page 7 line 2. The combiner time counter 224 increments every chip and resets after counting 80 ms of chips. Easton page 6 ll. 27-28. The combiner time counter 224 is

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initialized to a state which is four symbols delayed from finger time counter 208 of the finger tracking the earliest multipath signal. Easton page 6 ll. 35-37. The time counter 208 represents the finger time counter that increments every chip and resets after counting 2^{15} chips. Easton page 6 ll. 15-16. Thus the finger time counter 208 rolls over each 26.67 ms. See Easton page 5 line 33 (The PN spreading sequence period is 26.66 ms.). Therefore the counters identified by the Examiner do not have substantially the same periods.

Additionally, the counters in Easton do not have "a roll over point for each counter at a predetermined offset relative to each other counter." The various counters identified by the Examiner do not have a rollover at a predetermined offset. Indeed, because the periods of the various counters differ and are not integer multiples, the offsets of the rollover of each counter can vary from the other counters on each rollover.

Claim 1 additionally requires the rollover points "establish substantially equal time increments between adjacent roll over points." Easton fails to disclose such a configuration. In the portion of Easton cited by the Examiner, Easton states: "one finger of a plurality of fingers is directed by the microprocessor to delay its time reference exactly 6.66 ms from the other fingers." Easton page 9 ll. 19-20. Easton thus discusses a single finger that is offset from all other fingers by 6.66 ms. However, this creates time increments of 6.66 ms and 20 ms between adjacent rollover points, which is not substantially equal, as featured in claim 1.

Applicant thus believes that the claims are allowable over Easton, because Easton fails to disclose counters having substantially the same period or a rollover point for each counter at a predetermined offset relative to each other counter to establish substantially equal time increments between adjacent roll over points. Claims 11, 21, and 22 include similar features as discussed above in relation to claim 1, and therefore are believed to be allowable over Easton at least for the same reasons presented above for claim 1. Dependent claims 2, 5-6, 8, 10, 12, 15, 18, and 20 depend, either directly or indirectly from one of claims 1, 11, 21 or 22 and thus are believed to be allowable at least for the reason that they depend from an allowable base claim. Applicant respectfully requests the Examiner withdraw the rejections based on Easton.

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Discussion of Rejections Under 35 U.S.C. 103(a):

The Examiner has also rejected claims 3, 4, 13, and 14 under 35 U.S.C. 103(a) as allegedly unpatentable over Easton in view of Naruse (U.S. Patent No. 6,369,751). The Examiner has also rejected claims 7, 9, 17, and 19 under 35 U.S.C. 103(a) as allegedly unpatentable over Easton in view of Banister (U.S. 6,088,602). In order to establish a prima facie case of obviousness, the prior art references must teach or suggest all claim limitations. Additionally, there must be some suggestion or motivation to modify the reference or combine the reference teachings. Also, there must be a reasonable expectation of success in the combination or modification. However, neither Naruse nor Banister discuss the features of claims 1, 11, 21, and 22 that are lacking in Easton.

As discussed above, claim 1 includes "establishing a roll over point for each counter at a predetermined offset relative to each other counter to establish substantially equal time increments between adjacent roll over points."

Naruse is not prior art relative to the application being examined. Naruse issued on April 9, 2002 and was filed in the U.S. on October 19, 2000. In contrast, the subject application was filed on October 16, 2000, prior to the U.S. filing date of Naruse. Thus Naruse is not a prior art reference. Even so, Naruse fails to discuss multiple counters having roll over points in the claimed configuration. Thus, Easton in combination with Naruse fail to disclose every feature of the claims.

Similarly, Banister fails to discuss or suggest a plurality of counters of substantially equal periods," and "establishing a roll over point for each counter at a predetermined offset relative to each other counter to establish substantially equal time increments between adjacent roll over points." In contrast, Banister discloses two counters: a first counter that counts up to S*T0 cycles of the super chip clock and a second counter that counts cycles of the sleep mode clock. See Banister Abstract. Therefore, Banister also fails to discuss a plurality of counters of substantially equal time periods or substantially equal time increments between roll over points. Therefore, Easton in combination with Banister fail to disclose or suggest every feature of claim 1.

As noted above, independent claims 11, 21, and 22 include features similar to those discussed in relation to claim 1. Applicants thus believe that claims 11, 21, and 22 are allowable

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over Easton in combination with either Naruse or Banister for the same reasons presented above in relation to Claim 1. Claims 3, 4, 7, 9, 13, 14, 17, and 19 depend, either directly or indirectly from one of claims 1, 11, 21, or 22 and thus are believed to be allowable at least for the reason that they depend from an allowable base claim. Applicants respectfully requests reconsideration and allowance of claims 3, 4, 7, 9, 13, 14, 17, and 19.

CONCLUSION


In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated 9/9/04

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